Morbidity and Mortality Risks with Antipsychotic Use in Parkinson's Disease

Team Members:

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Funding:
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Length of Study:
3 years

Anticipated Impacts on Veterans Health:

The VA provides care for over 80,000 veterans with Parkinson's disease (PD), a chronic and degenerative movement disorder that occurs mostly during later life. It is common for PD patients to have symptoms of dementia and psychosis. These symptoms can be some of the most difficult for veterans and their families. Antipsychotic medications (AP) are used to help control these symptoms, but they also can increase the chances of new medical problems and death. These risks have been under-examined in patients with PD. Also, existing small treatment studies have not shown a clear benefit for AP use in PD patients. This study will further evaluate these patient safety risks that affect the growing population of older veterans, and will provide VA physicians with information to help them make the best treatment choices for their patients.

Project Background:

Use of atypical antipsychotic medications (APs) to treat the behavioral symptoms of dementia is associated with an increased risk of morbidity and mortality, but the research to date is limited as it has been primarily conducted with patients with Alzheimer's disease. Parkinson's disease (PD) is another neurodegenerative disease that presents with symptoms of dementia and psychosis. Although dementia, psychosis and AP use in PD are common, little research has examined the morbidity or mortality risks associated with this population. To evaluate these risks in PD patients taking APs, studies require large samples, statistical methodologies, and experience with large complex datasets. The VA has a large national PD center (PADRECC), and offers unmatched opportunities for large-scale assessments of treatment practices and patient outcomes.

Project Objectives:

The objectives of this study are to: (1) determine if AP use in PD is associated with increased morbidity; (2) determine if AP use in PD is associated with increased mortality; and (3) determine baseline moderators of risks associated with AP use in PD.

Study Design:

Our research team will use a retrospective cohort to address study objectives utilizing both national VA data registries and free-text clinical data from the VA electronic medical records for patients with PD who receive care. For the primary analysis, we will use a matched case-control design. Every PD patient who fills a new AP prescription will be matched with a control PD patient who did not start an AP. Secondary analyses will examine other potential moderators of morbidity and mortality risks in PD patients initiating AP medication.

Potential Impact:

Determining the clinical risks of AP use in PD will inform national policies and practices, improving the care of Veterans with PD. The results of this study will be of immediate interest to VHA and non-VHA clinicians alike to provide better guidance in using AP medications in PD. Results may spur further research, including controlled trials of medication changes for PD psychosis management.

Partner: Parkinson's Disease Research, Education and Clinical Center (PADRECC) at the Philadelphia Veterans Affairs Medical Center